

## Site Specific Recommendations

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# Del Mar Mesa

## 8.1.1



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### **8.1.1.a**      *Li Collins (H 40)*

#### Site Description and Existing Conditions

Li Collins (H 40) is a 0.3-acre, conserved site located within residential developments in the Torrey Highlands area. Two vernal pools, with a total of 154 m<sup>2</sup> (1657.642 ft<sup>2</sup>), occur on two lots on the west side of Donaker Street; the site is owned and managed by The Environmental Trust. The vernal pool site is zoned Open Space, and surrounding land uses include residential and transportation. Prior to residential and transportation development, the site was utilized for grazing.

These basins occur in the Olivenhain cobbly loam series and are surrounded by non-native grasslands. No sensitive vernal pool species were present in 1999 or 2003 (Helix, 1999; City of San Diego, 2004).

#### Threats

##### *Development*

This area was developed as part of the Li/Collins project (LDR 98-0405). No direct impacts occurred, and the site was conserved and fenced as part of the permit requirements. The preserve has been designated as open space and no additional development may occur.

##### *Invasive Species*

Vegetation within the preserve area is dominated by non-native grasses and forbs, presumably due to historic cattle grazing. Establishment of non-native species used in the landscaping of adjacent residences may also pose a threat.

##### *Trespass*

Signage and a 6-foot adobe fence have been installed to minimize trespass. Given the urban location, illegal trespass (especially children) may occur infrequently.

##### *Litter*

The site may be impacted by litter from neighborhood residents or nearby Carmel Valley Road. Trash dumping is unlikely to occur due to the location within a residential neighborhood.

##### *Fire and Fire Suppression*

Although the site may burn, it is very unlikely that the vernal pools would be impacted from fire suppression activities due to the adobe fence and the difference in grade between the preserve and nearby roads/residences.

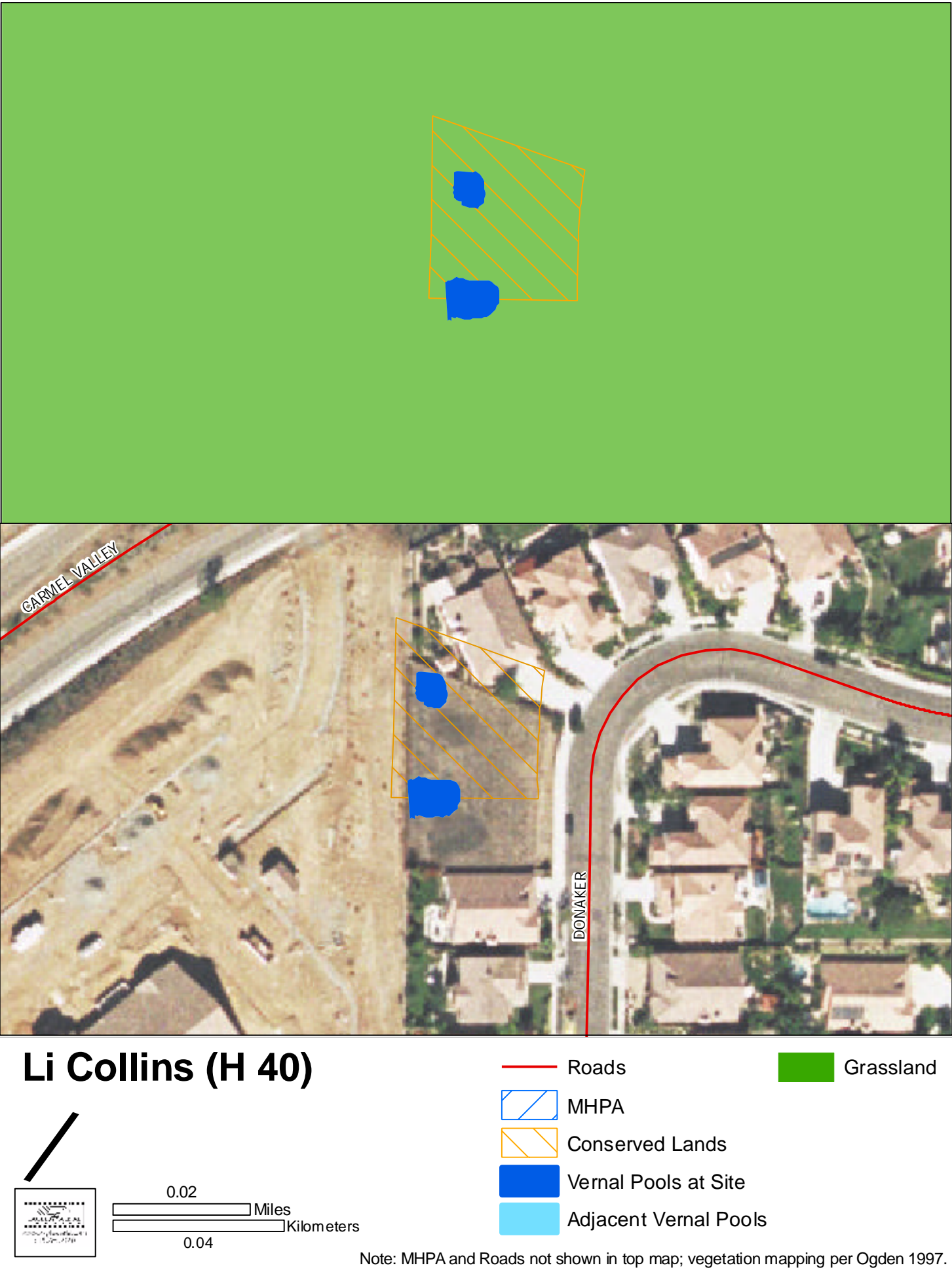
#### Current Management Activities

A permanent, 6-foot fence with appropriate signage and site conservation were required as permit conditions for the Li/Collins project (LDR 98-0405).

### Management Recommendations

Determine the current ownership and site management responsibility pending The Environmental Trust bankruptcy judgment. Annual maintenance should include fence and sign repair and trash removal, as necessary.

Figure 1



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### 8.1.1.b Greystone Torrey Highlands (H 39)

#### Site Description and Existing Conditions

Greystone Torrey Highlands (H 39) is a 3.5 acre vernal pool preserve and creation site located within a residential development of the same name. The site borders Camino del Sur and Highway 56, and is accessed via Torrey Meadows Drive and Torrey Gardens Place. This area was restored and conserved as mitigation for construction of SR 56 and the Greystone Torrey Highlands project (LDR 98-0392). The site was preserved via conservation easement (File No. 2001-0069428), recorded on February 6, 2001, and dedicated to the City of San Diego in fee title after completion of the 120-day restoration establishment period. The site is zoned Open Space and is outside the MHPA; surrounding land uses include transportation, residential neighborhoods and educational facilities.

This site has 19 vernal pools: three are natural, 16 have been restored. The basins cover a total of 2,771 m<sup>2</sup> (0.671 acres) and occur in Olivenhain cobbly loam soil. Uplands surrounding the vernal pools have been restored to coastal sage scrub. *E. aristulatum*, *P. abramsii* and *B. sandiegonensis* occur at Greystone Torrey Highlands.

Impacts to approximately 89 m<sup>2</sup> of vernal pools and 11 m<sup>2</sup> of road ruts were approved as part of the Greystone Torrey Highlands project, and 809 m<sup>2</sup> of impacts were approved for the construction of SR 56.

Prior to preservation and vernal pool restoration, the site was impacted by agriculture (including greenhouses), off-road vehicle use and illegal dumping. However, natural basins and coastal sage scrub vegetation remained in several areas. The site is currently fenced; the restoration process began in 2002.

#### Threats

##### *Restoration Success*

Success criteria, including species richness, vegetative cover, target species, and hydrologic regime are specified in the *Detailed Vernal Pool Restoration Plan for the City of San Diego/Greystone Homes Vernal Pool Preserve* (KEA Environmental, 2001) and the *As-Built Plan for the Torrey Highlands Vernal Pool Preserve* (EDAW, 2002). Remedial measures, approved by the City, will be required if restoration success criteria are not met within the specified time period.

##### *Invasive Species*

Prior to restoration, non-native invasive species were introduced through disturbance associated with off-road vehicle use, etc. Both uplands and vernal pools are being re-vegetated in accordance with the accepted *Restoration Plan*, which recognizes that weeds are a typical problem with habitat restoration. On-going maintenance throughout the establishment and monitoring periods has included invasive species removal from both upland and vernal pool habitats.

##### *Edge Effects*

The restoration site was designed to minimize impacts from edge effects such as litter and artificial night-lighting; however, the close proximity to development may result in

impacts from litter and domestic animals. Litter removal, fencing, and signage are included in the site maintenance required by the restoration plans.

#### *Trespass*

Off-road vehicles were a major threat prior to restoration of the site and development of the surrounding area. Fencing and signage were installed as part of site restoration in an effort to minimize trespass. However, the potential remains for trespass from the residents of nearby residential development, particularly children.

#### Required Management Activities

Pursuant to Biological Opinion 1-6-00-F-36, issued through a Section 7 consultation for a U.S. Army Corps of Engineers 404 permit, the following mitigation and management activities have been required as conditions of incidental take of San Diego fairy shrimp (*Branchinecta sandiegonensis*) resulting from the Greystone Torrey Highlands project (LDR 98-0392).

Lighting adjacent to the vernal pool preserve area must be shielded to prevent unnatural lighting of the site.

Graded slopes adjacent to the preserve must be re-vegetated with native species.

The *Vernal Pool Restoration Plan* (KEA Environmental, 2001) was accepted by the permitting agencies as mitigation for vernal pool impacts. The plan requires salvage of species and translocation of soils from impacted basins, preservation of 247 m<sup>2</sup> of vernal pool basin area, restoration of 1,712 m<sup>2</sup>, and creation of 1,485 m<sup>2</sup>.

Implementation of the *Plan* includes a 120-day establishment period, followed by five years of monitoring and maintenance, including: trash removal, weed control, hydrological/topographical modification, fence repair, and any necessary remedial measures, under the supervision of a re-vegetation specialist. The preserve was dedicated to the City of San Diego in fee title following the 120-day establishment period; funding for the additional five years of monitoring and maintenance is the responsibility of the developer.

As part of the mitigation plan, the site has been fenced with permanent, 6-foot high material selected to prevent OHV and pedestrian access. “No Trespassing” signs have also been placed around the preserve.

#### Management Recommendations

The site is owned by the City of San Diego and should be dedicated as open space by the Park and Recreation Department.

Active habitat restoration shall continue, as necessary, until the success criteria are met. These criteria, detailed in the approved *Restoration Plan* (KEA Environmental, 2001), shall be used by the restoration specialist and permitting agencies to determine the completeness of mitigation.

In accordance with the *Plan*, fence repair will be required as necessary in perpetuity. Semi-annual maintenance patrols should occur to determine the need for fence repair and/or signage replacement, as well as litter and invasive species assessment.

If invasive species control is necessary, weeding within and immediately adjacent to vernal pools should be done by hand. In upland areas, mechanical removal may be necessary, however, herbicides should not be used in or adjacent to vernal pools.

Given the proximity of the site to single- and multi-family neighborhoods, it is recommended that educational programs be provided through local schools, Home-Owner's Associations (HOAs), community groups, etc. These sessions should stress the sensitivity of the resources and discuss the importance of minimizing litter, trespass and other impacts at the site. Informed neighborhood groups may also conduct maintenance activities under the supervision of a qualified biologist. All programs should strive to present information in a manner that will increase interest in the natural world and cultivate a sense of ownership of local open space, with the overall goal of developing positive neighborhood awareness of the preserve.

Land managers should encourage research opportunities, especially relating to the long-term success of restored vernal pools and isolated preserves.

Figure 2



### 8.1.1.c *Rhodes (H 18-23)*

#### Site Description and Existing Conditions

The Rhodes (H 18-23) vernal pool site covers 102 acres southwest of the intersection of SR-56 and Carmel Mountain Road, adjacent to the Del Mar Mesa open space area. This privately-owned site is being developed as the Rhodes Crossing project (PTS 3230); the watersheds and basins of the vernal pools were preserved through the permitting process (see “Development” below for additional information). The vernal pools are on land zoned Residential and Commercial; adjacent land uses include MHPA/open space, residential, transportation and commercial retail.

One hundred fifty vernal pools (3,051.06 m<sup>2</sup> [3, 2841.31 ft<sup>2</sup>] basin area) and road ruts were mapped by Helix in 1998; similarly, 152 vernal pools/road ruts were mapped by the City in 2003. The site occurs within the Redding gravelly loam soil series. Upland vegetation surrounding the vernal pools includes Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral and non-native grasslands. *E. aristulatum*, *P. abramsii* and *B. sandiegonensis* have been recorded at Rhodes.

Prior to the current construction, portions of the site were utilized for agriculture. The Rhodes vernal pools are generally natural in origin, although impacts have occurred from off-road vehicles, pedestrians, and geologic borings. The vernal pools and their watersheds have been conserved by a conservation easement as part of the Rhodes project; vernal pools will be managed according to the accepted *Vernal/Road Pool Enhancement Plan* (Helix, 2003).

#### Threats

##### *Development*

The Rhodes Crossing development project has been approved for construction (PTS 3230). The vernal pool area and the associated watershed(s) were conserved via conservation easement as a condition of the project.

##### *Invasive Species*

Non-native species occur in the disturbed and ruderal portions of the Rhodes site.

##### *Edge Effects*

The majority of the Rhodes vernal pools will be surrounded by development. Edge effects will be minimized through enhancement and restoration, proximity to the Del Mar Mesa vernal pools, and management in perpetuity.

##### *Fire and Fire Suppression*

The conserved areas may be impacted if used as staging area during a fire suppression event.

#### Required Management Activities

The management activities discussed in this section are permit conditions associated with approval of the Rhodes Crossing project (PTS 3230). Specific details are available in the accepted *Vernal/Road Pool Enhancement Plan* (see Appendix G of the *Habitat Management Plan* in the Biological Technical Appendices of the project EIR

[Helix, 2003]). The costs associated with these required management activities, including a one-time endowment to fund long-term management needs, are the responsibility of the project applicant.

Site and vernal pool enhancement will include trash removal, weed control, re-contouring of mounds and/or basins where necessary to normalize the hydrologic regime, soil de-compaction, reintroduction of sensitive species using on-site or nearby seed banks, and upland watershed restoration to encourage native species.

The habitat of the Rhodes Crossing preserves will be monitored quarterly in perpetuity to record changes and/or stasis in the natural communities. Vegetation transects will be surveyed at three-year intervals. Areas exhibiting change will be monitored closely to determine cause(s), and alternative management may be recommended based upon conclusive findings.

Control of exotic plants and animals will occur as deemed necessary by the Habitat Manager. In addition, educational material and programs will be made available to the local residents.

Brush management and other fire management activities shall occur as described in the *Habitat Management Plan* (Helix, 2003). Trails and barriers will be located to minimize hazards to environmental resources while maximizing public appreciation of the preserved areas.

Public awareness and education will include interpretive signs, attendance at local community and HOA meetings by the Habitat Manager (twice a year minimum), a bi-annual newsletter and as-needed bulletins of educational and restoration activities.

Trash removal will occur at regular intervals or as necessary. The Habitat Manager will be responsible for reporting illegal occupants and poachers to the appropriate law enforcement agency. Signage, barriers and fencing sufficient to protect the vernal pools will be installed and maintained.

Lighting will not be installed within conserved areas and, in adjacent lots, will be shielded to direct spillage away from vernal pool areas. Grading, development, and landscape irrigation will be completed in a manner to avoid unnatural drainage to vernal pools during and after construction.

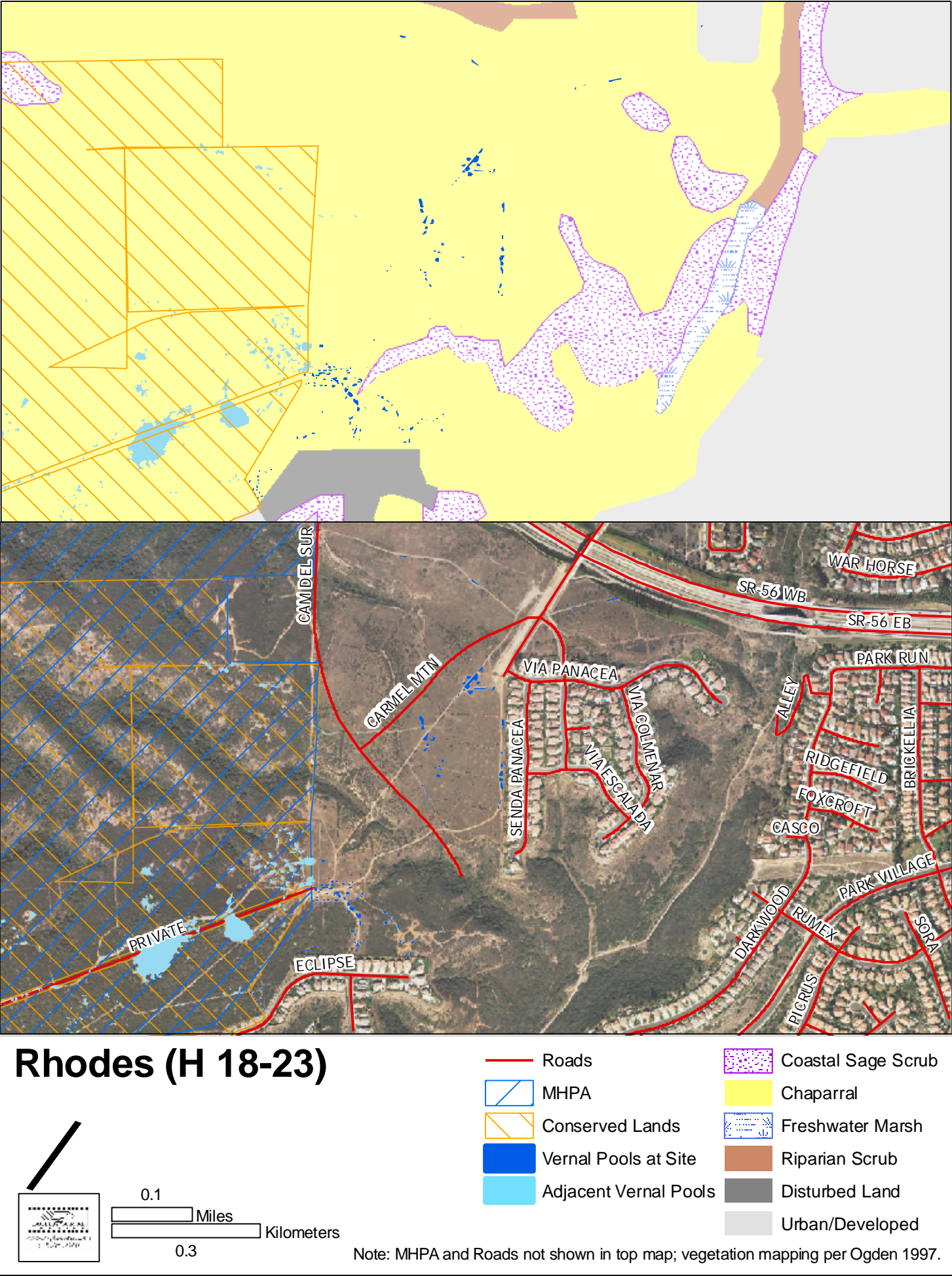
#### Management Recommendations

This site was identified as necessary to stabilize the populations of *E. aristulatum*, *P. abramsii* and *B. sandiegonensis*, which occur at this site (*Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998). All future management activities should promote the stabilization and recovery of these species.

The Habitat Manager should encourage research studies, including projects to assess the impact of edge effects and isolation on vernal pool habitats and their associated species.



Figure 3



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